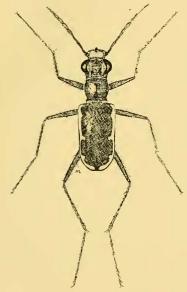
FIVE NEW SPECIES OF CICINDELA FROM TROPICAL AUSTRALIA.

BY THOMAS G. SLOANE.

CICINDELA HACKERI, n.sp.

Elongate. Antennæ with joints 5-11 swollen. Head and prothorax of a greenish-bronze, front and clypeus greenish: elytra black, opaque; a white stripe on each elytron extending



from shoulder nearly to apical sutural angle-inner margin of this white stripe produced at about basal fourth, middle, and apical fourth, middle process about as wide as the stripe itself and extending inwards to about the sutural third of the width of elytron, anterior and posterior processes merely forming sinuosities in the outer margin of the black discoidal area; margin black, very narrow on apical curve; under surface bright metallic-blue, prosternum and mesosternum with white hairs above anterior and middle coxæ. a stripe of white hair extending from anterior margin of metepisterna obliquely backwards

on to posterior coxæ; all the coxæ with white hair, and the femora with scattered white setæ; labrum white with anterior margin infuscate, the anterior infuscation reaching backwards for half

the length of the labrum; palpi black with greenish reflections; antennæ black with four basal joints purple; legs metallic-green or purple.

Head 2.5 mm. across eyes, deeply channelled and striolate between eyes; occiput rugulose; front and clypeus shagreened. Labrum large, convex, particularly in middle of base, 7-dentate. Prothorax a little broader than long (1.6×1.75 mm.), rugose, strongly transversely impressed anteriorly and posteriorly, canaliculate in middle, anterior impression widely > shaped. Elytra long, parallel (5.8×2.9 mm.), opaque; discoidal area shagreened, punctulate on basal half, puncturation obsolete on apical half; sutural border with a short spine at apex; a subsutural longitudinal row of green punctures extending backwards from each side of scutellum to apical fourth, a few similar punctures in a depression near each shoulder. Length 10, breadth 5.8 mm.

Hab. -Q.: Cooktown (Colls. Hacker, Lea, Sloane, French).

This elegant species was brought from Queensland by Mr. Henry Hacker, who took a number of specimens along the railway line about three miles from Cooktown; and who presented me with specimens. It is allied to C. iosceles, Hope, but evidently differs by the pattern of the elytra, etc.; it is also allied to C. doddi, Sl., but differs by antenne swollen after fourth joint, serrations of anterior margin of labrum, pattern of elytron, etc. According to the accepted system of classification, it comes into the genus Antennaria (Dokhtourhoff, 1883), but (apart from the fact that Antennaria is invalidated by an earlier generic use of Antennarius) it appears to me that C. doddi, which has not the antennæ swollen towards the apex, is congeneric with C. hackeri, and that therefore the swollen antennæ of C. iosceles and C. hackeri do not, in themselves, form a character requiring these species to be separated from the genus Cicindela.

CICINDELA DODDI, n.sp.

3. Head and prothorax with upper surface bronzy; elytra black with a bronzy tinge (the dark part opaque, subsericeous,

shagreened), three whitish spots on each elytron—the first humeral, narrow, oblong, extending backwards to about the level of the posterior margin of the metasternal episterna, infuscate behind humeral angle; the second irregularly triangular, opposite second ventral segment; the third narrow, extending from apical curve two-thirds of distance towards sutural apex; under surface of body and prothorax, and sides of head metallic-blue; femora green, four anterior ones with apex obscurely testaceous; tibiæ brown near base, becoming of an obscure purple tinge towards apex; tarsi similar in colour to apex of tibiæ; trochanters black; antennæ with joints 5-11 almost black, joints 1-4 brownish with a greenish tinge on upper surface of first and towards base of third and fourth; labrum, base of mandibles and palpi whitish; extreme edge of labrum, apex of mandibles, and apical joint of palpi black; four anterior coxe, and sides of mesosternum and metasternum clothed with long white hair, similar hairs (but shorter) on femora, these much sparser on posterior femora.

Head much wider than prothorax (1.9 mm. across eyes); clypeus smooth. Labrum rather long, convex, a small distinct setigerous lateral angle on each side at about half the length; margins sloping forward lightly and obliquely from these lateral angles; anterior angles sharply marked, shortly triangular; anterior margin lightly advanced in middle; a deep notch, with a seta at bottom, on each side of median prominence; a small triangular prominence between each anterior angle and the notch defining the median prominence. Prothorax narrow, as long as broad (1.4 × 1.4 mm.); anterior transverse impression hardly marked; basal transverse impression feebly developed. narrow, oval $(4.5 \times 2.5 \text{ mm.})$, subparallel on sides, subdepressed: a short distinct punctate longitudinal depression extending backwards from each side of peduncle; a longitudinal row of about nine subfoveolate punctures extending from each side of scutellum to apex, the punctures closer together near base; a similar row of punctures extending backwards from each side of peduncle to middle of elytra. Prosternal episterna lævigate, convex. Length 8, breadth 2.5 mm.

Hab. -Q.: Kuranda (Coll. Sloane; unique).

I received a single specimen from Mr. F. P. Dodd (from whom I have had large and valuable collections of Carabidæ from North Queensland), and to whom I have much pleasure in dedicating this interesting species. Its affinity seems to be towards C. iosceles, Hope, from which its narrow antennæ not swollen towards apex at once differentiate it. Though somewhat resembling C. froggatti, it differs too conspicuously from that species to be taken for it, having the head and prothorax narrower; elytra not covered with variolose punctures, their pattern different, disc with two longitudinal rows of punctures.

CICINDELA PLEBEIA, n.sp.

Q. Upper surface of a general blackish colour; head between eyes subviolaceous, clypeus blue, labrum whitish with middle of apex black; disc of prothorax olivaceous, submetallic; sides of head behind eyes and sides of pronotum greenish; elytra black, opaque (subsericeous), with a metallic tinge on each side behind shoulders; a triangular pale spot on margin of each elytron just after the beginning of apical curve; under surface of head, prothorax and body of a beautiful blue colour; femora greenish.

Head as in C. interrupta, Fabr., (2·2 mm. across eyes). Labrum with anterior margin rounded and strongly unidentate in middle, 4-setose. Prothorax as in C. interrupta (1·3 × 1·5 mm.), but more coarsely rugulose and less strongly transversely impressed anteriorly and posteriorly. Elytra as in C. interrupta (4·75 × 2 7 mm.), shagreened, punctate, the puncturation stronger towards base than apex. Length 7·5, breadth 2·2 mm.*

^{*} Postschipt (added July 10th, 1905).—While this paper has been passing through the press, I have received from Mr. Dodd the male of C, plebeia, which differs from the female only in being a little smaller, and by the shape of the anterior margin of the labrum. $\mathcal J$. Labrum with apex rounded on sides, bisinuately truncate in middle, outer angles of this median truncature small, subdentiform, more prominent than the feeble median prominence; sixth ventral segment very lightly and widely emarginate at apex. Length 7, proth. 1.2×1.35 , el. 4.4×2.5 mm.

Hab.—Q.: Cairns (Dodd: Coll. Sloane).

Allied to *C. interrupta*, Fabr., (= *C. circumcincta*, Cast.) but differing by smaller size, labrum unidentate in middle, under surface glabrous, with only a few scattered hairs on middle of abdomen and sides of metasternum, colour of elytra and under surface, etc.

CICINDELA CURVICOLLIS, n.sp.

3. Of a bronze colour; elytra opaque, subnitid towards lateral margins; a narrow transverse white fascia at half the length extending from lateral border towards middle of width, inner end of this fascia curved backwards; a small white spot at apical third of the length and sutural third of the width; labrum dirty white; mandibles pallid with apex infuscate; femora bronzy; coxe, apex of femora, and greater part of tibiæ lurid-testaceous; abdomen metallic-blue.

Head 2 mm. across eyes, rugulose; eyes large and prominent. Labrum finely 3-dentate in middle, 4-setose. Prothorax small, a little broader than long (1.25×1.4 mm.); upper surface coarsely shagreened; a rather deep transverse impression near anterior margin, and a wider and less strongly marked impression across base; disc subconvex; sides lightly rounded between anterior and posterior transverse impressions; base and apex truncate. Elytra subparallel on sides (4.5×2.5 mm.), roundly and decidedly declivous to lateral border on basal half; derm finely shagreened and punctate, the puncturation fine but distinct on basal half, very fine on apical half; apex evenly curved, with border finely and closely serrulate; sutural border shortly mucronate at apex. Length 7, breadth 2.5 mm.

Hab.—North-west Australia (Coll. Sloane; given to me by Mr. C. French).

Allied to *C. mastersi*, Macl., by form of labrum and rounded sides of prothorax, but distinct by different colour; smaller size; prothorax less transverse; elytra less strongly shagreened, and with different pale markings. In general appearance it resembles *C. froggatti*, Macl., but differs by the labrum 3-dentate, and only

4-setose; prothorax more strongly rounded on sides; elytral markings, etc.

CICINDELA LEAI, n.sp.

Subcylindrical cupreous; elytra strongly and closely punctate. Clypeus and a narrow mark extending backwards between eyes from base of antennæ on to vertex blue; labrum dirty white, with a large infuscate basal area; each elytron with two lateral triangular white spots, the anterior just behind middle, the posterior on external half of apical margin; sides of head and prothorax of a bright cupreous colour; abdomen blue; sides of mesosternum, metasternum (including episterna) and posterior coxæ clothed with white hair; femora greenish towards base, lurid towards apex; tibiæ and tarsi blackish-green.

Head $1.8 \, \mathrm{mm}$, across eyes, channelled and striolate between eyes; occiput rugulose. Labrum 7-dentate. Prothorax rugulose, as long as broad ($1.3 \times 1.3 \, \mathrm{mm}$.), subcylindrical; anterior and posterior transverse impressions well marked, but not deep; sides hardly rounded between them. Elytra much wider than prothorax ($4 \times 2.15 \, \mathrm{mm}$.), very convex, parallel on sides; puncturation close and coarse, finer towards apex than towards base; sutural border with a small sharp spine at apex. Length 6.75, breadth $2.15 \, \mathrm{mm}$.

Hab.—Cooktown (Colls. Hacker, Lea, French and Sloane).

Mr. Hacker (to whom I am indebted for specimens) took this pretty little species near the same spot where he obtained C. hackeri, Sl. It is closely allied to C. tenuicollis, Macl., but differs by larger size; prothorax wider, not longer than broad (C. tenuicollis 1·25 × 1·1 mm.), the disc more depressed (not roundly convex) both transverse impressions less deeply marked, sides less rounded between them; elytra with anterior white spot larger, not circular, its outer edge not a considerable distance from border.